

REMARKS

The Examiner alleges that the application is directed to two inventions. Group I includes claims 1-14 allegedly drawn to a method for producing a fluid pervious web, and Group II includes claims 15-24 allegedly drawn to a fluid pervious and patterned web. The Examiner alleges that the two groups of claims are distinct because a materially different process, such as an aperturing, may be used to produce the patterned fluid pervious web.

Applicants elect claims 15-24. However, the restriction is traversed.

The single reason given by the Examiner for alleging that the inventions are distinct is based on a misunderstanding of the claims. The method of claims 1-14 relates to producing a fluid pervious fabric. However, none of the method steps relate to rendering the fabric fluid pervious. The method steps relate to deforming a portion of the fabric structure in the Z-direction in the deformation zones. Note that claim 1 specifically states that the fluid permeability remains essentially unchanged. Thus, whether or not a patterned fluid pervious web can be rendered fluid pervious by aperturing is irrelevant to the method of claims 1-14.

Thus, the Examiner's alleged reason for rendering Groups I and Group II distinct are not supported by the claims.

Furthermore, Applicants submit that a thorough search of the subject matter of claims 15-24 would be essentially coextensive with thorough search of the subject matter claims 1-14. Accordingly, there would be little additional burden on the Office to examine the claims together.

Accordingly, the Examiner is respectfully requested to withdraw the restriction requirement and to examine claims 1-24, as amended above.

In the event that there are any questions concerning this amendment, the election, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

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Attachment to Amendment dated January 17, 2003

Mark-up of Claims

1. (Amended) A method for producing a fluid-pervious fabric [(101; 201; 301; 401)] for imparting a pattern [(502,502, 502)] to a fibre web [(503)], said fabric comprising at least one polymer material with a softening temperature, a first surface [(104: 204; 304; 404)], a second surface [(105; 205; 305; 405)] opposite said first surface, and a fabric structure [(106: 206; 306; 406)] comprising a plurality of channels providing fluid permeability between said first and said second surfaces, [wherein] the method comprising bringing said second surface [(105: 205; 305; 405) is brought] into contact with an essentially rigid support [(107: 207; 307)] having a fabric-contacting side [(108: 208; 308)] with first fabric patterning members [(109, 109': 209,209'; 309, 309')] in a desired configuration and a backside [(110:210; 310)] opposite said fabric-contacting side, [characterized in that] heating the fluid-pervious fabric [(101';201';301) is heated] to a temperature higher than said softening temperature, and [that] applying a forming pressure $[(\Delta p_1; \Delta p_2; \Delta p_3)$ is applied] between said first surface [(104:204; 304)] and said second surface [(105: 205; 305)], so that said first fabric patterning members [(109, 109': 209, 209'; 309, 309')] contribute to a deformation of said fabric structure [(106: 206; 306; 406)] in the Z-direction in deformation zones [(111, 111', 111"; 211; 311; 411,411', 411")] in which said fluid permeability remains essentially unchanged, whereafter cooling said fluid-pervious fabric [(101; 201; 301; 401) is cooled] down to a temperature lower than said softening temperature in order to render said deformation in the Z-direction permanent.

Attachment to Amendment dated January 17, 2003

2. (Amended) [A] The method according to claim 1, wherein [characterized in that] the forming pressure $[(\Delta p_1)]$ is created by means of first and second press surfaces $[(108, 112)]$ arranged in order to form a press nip, wherein said first fabric patterning members $[(109, 109')]$ are provided on said first press surface $[(108)]$ being part of said support $[(107)]$, and are cooperating with inverse, second patterning members $[(113, 113')]$ on said second press surface $[(112)]$.

3. (Twice Amended) [A] The method according to claim 1, [characterized in that the heating means are] wherein a heater is provided in at least one of said press surfaces $[(108, 112)]$ and [heat] heats said fabric structure $[(106)]$ at least in positions intended to become said deformation zones $[(111, 111')]$.

4. (Twice Amended) [A] The method according to claim 2, [characterized in that] wherein the fluid-pervious fabric is preheated before said deformation in the Z-direction.

5. (Twice Amended) [A] The method according to claim 2, [characterized in that] wherein at least one of said press surfaces $[(108, 112)]$ is provided on a rotatable embossing roll.

Attachment to Amendment dated January 17, 2003

6. (Twice Amended) [A] The method according to claim 2, [characterized in that] wherein the second fabric patterning members [(113, 113')] are provided on a single point deforming [means] element programmed for generating said deformation in a chosen configuration across at least one of said surfaces of said fluid-pervious fabric contacting said support.

7. (Amended) [A] The method according to claim 1, [characterized in that] wherein the forming pressure is created at least partially by means controlling the pressure in a fluid provided on at least one side of a flexible and elastic, fluid-impermeable membrane, which in cooperation with said first fabric patterning members causes said deformation in the Z-direction of the fluid-pervious fabric.

8. (Amended) [A] The method according to claim 1, [characterized in that] wherein also said support [(207; 307)] is fluid-pervious, wherein a fluid of a higher temperature than said softening temperature is passed through said channels of said fluid-pervious fabric [(201'; 301')] and through said support [(207; 307)] at a flow rate [(F₂; F₃)] sufficient for generating said forming pressure [(Δp_1); (Δp_3)] and causing said deformation in the Z-direction.

9. (Amended) [A] The method according to claim 3, [characterized in that] wherein a flexible and elastic membrane [(314)] with a lower fluid permeability than said

Attachment to Amendment dated January 17, 2003

fabric structure is brought into contact with said first surface [(304)] of said fluid-pervious fabric [(301')], and that said fluid is passed through said membrane [(314)], said fabric [(301')] and said support [(307)], wherein said membrane [(314)] provides a contribution to said forming pressure $[(\Delta p_1)]$.

10. (Twice Amended) [A] The method according to claim 7, [characterized in that] wherein the support comprises a heating zone in which said fluid is added for heating said fabric and creating said forming pressure.

11. (Twice Amended) [A] The method according to claim 7, [characterized in that] wherein the support comprises a cooling zone subsequent to said heating zone.

12. (Twice Amended) [A] The method according to claim 7, [characterized in that] wherein the fluid-pervious fabric is heated with heated air before said deformation in the Z-direction, and that the fluid-pervious fabric thereafter is cooled down with cooled air in order to render said deformation permanent.

13. (Twice Amended) [A] The method according to claim 7, [characterized in that] wherein the support is a rotatable, cylindrical roll.

Attachment to Amendment dated January 17, 2003

14. (Twice Amended) [A] The method according to claim 7, [characterized in that] wherein the support comprises a sintered metallic material or a metal wire.

15. (Amended) A fluid-pervious fabric for imparting a pattern to a fibre web, said fabric [(401)] comprising at least one polymer material with a softening temperature, a first surface [(404)], a second surface [(405)] opposite said first surface, and a fabric structure [(406)] comprising a plurality of channels providing fluid permeability between said first and said second surface, [characterized in that] wherein the fluid-pervious fabric [(401)] exhibits a permanent deformation of said fabric structure [(406)] in the Z-direction in deformation zones [(411, 411', 411'')] in which said fluid permeability is essentially equal to the fluid permeability in fabric zones outside said deformation zones.

16. (Amended) A fluid-pervious fabric according to claim 15, [characterized in that] wherein the polymer material exhibits portions which have been softened and subsequently solidified in the deformation zones [(411, 411', 411'')].

17. (Twice Amended) [A] The fluid-pervious fabric according to claim 15, [characterized in that] wherein the fluid-pervious fabric [(401)] exhibits said deformation in a chosen configuration across at least one of said surfaces [(404, 405)].

Attachment to Amendment dated January 17, 2003

18. (Amended) A patterned fibre web, comprising a plurality of fibres arranged in a fibre structure [(515)] having a grammage and a porosity, [characterized in that] wherein the fibre web [(503)] exhibits a deformation of said fibre structure [(515)] in the Z-direction in deformation zones [(502, 502', 502'')], wherein the grammage and the porosity within said deformation zones are essentially equal to the grammage and porosity outside the deformation zones.

19. (Amended) [A] The patterned fibre web according to claim 18, [characterized in that] wherein the deformation zones [(502, 502', 502'')] are visible as a chosen pattern across both surfaces [(516, 517)] of said fibre web [(503)].

20. (Twice Amended) [A] ~~The~~ patterned fibre web according to claim 18, [characterized in that] wherein the fibre web [(503)] has been wet-formed or foam-formed.

21. (Twice Amended) [A] ~~The~~ patterned fibre web according to claim 18, [characterized in that] wherein the fibre web has been air-laid.

22. (Twice Amended) [A] ~~The~~ patterned fibre web according to claim 18, [characterized in that] wherein the fibre web has been hydraulically apertured or entangled.

Attachment to Amendment dated January 17, 2003

23. (Twice Amended) [A] The patterned fibre web according to claim 18,
[characterized in that] wherein the fibre web has been through-air dried (TAD).

24. (Twice Amended) [A] The patterned fibre web according to claim 18,
[characterized in that] wherein the patterns [(502, 502', 502'')] in the fibre web [(503) has]
have been created by means of forming [and/or] or patterning/aperturing on, [and/or] or
drying or shaping in contact with at least one fluid-pervious fabric [(401)] according to
claim 15.